hen Surgeons Leave Objects Behind

NAHAD O'CONNOR SEPTEMBER 24, 2012 4:50 PM

The next day she underwent a CT scan, which led to a startling diagnosis: A surgical sponge was lodged in her abdomen, left behind, it turned out, by a surgeon who had performed her hysterectomy four years earlier.

Ms. Savage's doctor ordered immediate surgery to remove the sponge.

"What they found was horrific," Ms. Savage said. "It had adhered to the bladder and the stomach area, and to the walls of my abdominal

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cavity."

The festering sponge had spread an infection, requiring the removal of a large segment of Ms. Savage's intestine. She sued the hospital where the hysterectomy had taken place, and in 2009 she won $2.5 million in damages. But the award has been appealed, and her life has been in tatters. Suffering from severe bowel issues and unable to work, Ms. Savage, 59, has been racked by anxiety and depression. Most days, she said, she cannot bring herself to leave home.

"I never dreamed something like this would happen to me," she said.

Every year, an estimated 4,000 cases of "retained surgical items," as they are known in the medical world, are reported in the United States. These are items left in the patient's body after surgery, and the vast majority are gauzelike sponges used to soak up blood. During a long operation, doctors may stuff dozens of them inside a patient to control bleeding.

Though no two cases are the same, the core of the problem, experts say, is that surgical teams rely on an old-fashioned method to avoid leaving sponges in patients. In most operating rooms, a nurse keeps a manual count of the sponges a surgeon uses in a procedure. But in that busy and sometimes chaotic environment, miscounts occur, and every so often a sponge ends up on the wrong side of the stitches.

In recent years, new technology and sponge-counting methods have made it easier to remedy the problem. But many hospitals have resisted, despite the fact that groups like the Association of Operating Room Nurses and the American College of Surgeons have called on hospitals to update their practices.

As a result, patients are left at risk, said Dr. Verna C. Gibbs, a professor of surgery at the University of California, San Francisco.

"In most instances, the patient is completely helpless," said Dr. Gibbs, who is also the director of NoThing Left Behind, a national surgical patient safety project. "We've anesthetized them, we take away their ability to think, to breathe, and we cut them open and operate on them. There's no patient advocate standing over them saying, 'Don't forget that sponge in them.' I consider it a great affront that we still manage to leave our tools inside of people."

All sorts of tools are mistakenly left in patients: clamps, scalpels, even scissors on occasion. But sponges account for about two-thirds of all retained items.

When balled up, soaked in blood and tucked inside a patient, a 4-by-4-inch cotton sponge is easy to miss, especially inside large cavities. Abdominal operations are most frequently associated with retained sponges, and surgeons are more likely to leave items in

overweight patients.

Hospitals traditionally require that members of a surgical team, usually a nurse, count — and then recount, multiple times — every sponge used in a procedure. But studies show that in four out of five cases in which sponges are left behind, the operating room team has declared all sponges accounted for.

Now hospitals have a more technological approach at their disposal. They can track sponges through the use of radio-frequency tags. In a study published in the October issue of The Journal of the American College of Surgeons, researchers at the University of North Carolina at Chapel Hill looked at 2,285 cases in which sponges were tracked using a system called RF Assure Detection. Every sponge contained a tiny radio-frequency tag, about the size of a grain of rice. At the end of an operation, a detector alerts the surgical team if any sponges remain inside the patient. In the U.N.C. study, the system helped recover 23 forgotten sponges from almost 3,000 patients over 11 months.

Created by a thoracic surgeon at Weill Cornell Medical Center in New York, the RF Assure system adds about $10 to the cost of a procedure, roughly the cost of a single suture used in surgery.

“It’s a small price to pay to enhance patient safety,” said Dr. Leo R. Brancazio, the medical director of labor and delivery at Duke University Hospital in North Carolina, which adopted the RF Assure system about 18 months ago, after a sponge was left inside a patient during a Caesarean delivery. “It’s one extra step that takes 12 seconds at the end of a procedure.”

Another tracking system relies on bar code technology. Every sponge receives a bar code, which is scanned before use and scanned again as it is retrieved.

Electronic tracking can be a safety net when manual counting fails. Yet nationwide, fewer than 1 percent of hospitals employ it, said Dr. Berto Lopez, an obstetrician-gynecologist and the chief of the safety committee at West Palm Hospital in West Palm Beach, Fla.

Dr. Lopez became an advocate for electronic tracking after he was sued in 2009 for leaving a sponge inside a patient — an error that occurred, he said, after two nurses assured him that all sponges had been accounted for. He now refuses to operate in any hospital that does not use electronic tracking.

“When something bad happens to you, you get religion,” he said. “I’ve been rampaging ever since this happened. You study the subject, and you realize that this happens to a lot of people.”

Dr. Lopez, who said he had no financial interest in tracking systems, said that even though radio-frequency tracking is relatively cheap, many hospitals do not want the added expense.

“In my heart, I think it comes down to hospitals not wanting to

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spend the 10 bucks," he said.

But Dr. Gibbs, of NoThing Left Behind, said technology should be only an adjunct to manual counting. Some hospitals now use inexpensive "counter bags" that resemble the shoe storage bags that hang from closet doors. Each sponge has its own compartment. If a compartment is empty at the end of an operation, a nurse can see that a sponge is missing. Then, Dr. Gibbs said, an electronic tracking system can help find the missing sponge.

At the same time, she added, sponge counts should not be the sole responsibility of nurses: Everyone in an operating room must share accountability. Surgeons can tell nurses where sponges are being placed, for example, and conduct thorough wound exams to look for sponges before stitching up a patient.

"Technology is but an aid," Dr. Gibbs said. "The way that safety problems are corrected and fixed is by changing the culture of the O.R."

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